Federal Reserve Board

# Course Description for Basel II: Retail Activities

**Course Catalog Detail** 

# **BASEL II: RETAIL ACTIVITIES**

### TYPE OF PARTICIPANT TARGETED

This course is designed as a supplementary course for safety and soundness examiners and supervision staff who have an interest or anticipate having a responsibility for examining mandatory or opt-in Basel II banks.

### PRECOURSE PREPARATION

Prior to attending the course, participants are expected to complete the precourse online study modules developed on FSI Connect. Access can be provided by contacting the learner's training department to obtain an FSI Connect account number.

### **COURSE OVERVIEW**

This 3.5 day course is directed to examiners/supervisory staff who have been identified as Level 2 - Basel II Specialist for Quantification and Validation, or designated as needing this level of training. Upon completion of this course, examiners will have intermediate knowledge of quantification concepts for wholesale mortgage, credit card, student loans, auto loans, small business, and other retail portfolio activities. Additional training objectives will include knowledge of key components of model structure (e.g., credit risk, probability of default, loss given default, exposure at default, estimated loss, correlation, and unanticipated losses). The goal of this course is to provide a general understanding of the Basel II Internal Ratings-based (IRB) approach as applied to retail portfolios for examiners/supervisory staff that will be participating in IRB reviews.

### **COURSE OBJECTIVES**

By the end of this 3.5 day course, participants will be able to:

- Describe the conceptual framework behind the international capital accords
- Differentiate between regulatory, available, and economic capital
- Explain basic statistics (such as descriptive statistics, distributions, and regression) underlying the credit capital calculations of Basel II
- Segment the retail portfolios based on risk homogeneity

- Apply the risk parameter estimate technique, specific for PD, LGD, and EAD
- Explain the basic components of quantification, validation, and stress testing that is considered concurrently with the design of the IRB

# POST-COURSE INTERVENTION

After completing Basel II Retail, the examiners with this level of knowledge will be able to compare the bank's current risk measurement practices against the Advanced Internal Rating Based Approach requirements for retail quantification and report where those practices may fall short of supervisory expectations. It is expected that individuals with this level of knowledge would work closely with Level 3 specialists in model evaluation.

### OVERVIEW OF CURRICULUM

### **BASEL II RETAIL AGENDA**

### Day One

Time Assigned
1. 5 hours
1. 0 hours
1.0 hours
2.0 hours

### Day Two

Time	Module	Time Assigned
8:30 AM	Segmentation - Intro and Design	1.5 hours
10:30 AM	Segmentation - Applications & Example	1.0 hours
11:30 AM	Quantification - Process	1.0 hours
1:30 PM	Quantification – Practice and Capital Functions Activity	1.5 hours
3:00 PM	Probability of Default – Intro, Data, Model, and PD Quantification	2.0 hours

### Day Three

Time	Module	Time Assigned
8:30 AM	Loss Given Default - Overview and	2.5 hours
1.0	Estimation	
11:30 AM	Securitization	1.O hours

1:30 PM	EAD Intro., Measure, Activity	2.5 hours
4:00 PM	Validation - Overview	1.0 hours

### Day Four

Time Module Time Assigned
8;30 AM Validation – Developmental Evidence, Monitoring, Sensitivity, Stress and

Statistical Tools

### LEARNING OBJECTIVES

By the end of this course, learners should be able to:

# **Building Blocks**

- Summarize differences between Basel I and Basel II
- · Explain the framework of Basel II
- Differentiate between regulatory capital, economic capital, and available capital.

# Segmentation

- Explain the purpose of segmentation as applied in credit risk management and IRB credit risk systems
- Explain the general segmentation design and model development issues
- List the specific IRB requirements for retail credit risk segmentation

# Quantification

- Explain the three risk parameters to be quantified for A-IRB
- Describe the four components of any quantification process

# Probability of Default (PD)

- Explain the role that PD plays in total losses
- List the requirements for IRB quantification of PD

- Identify issues in PD quantification:
  - Data availability over economic cycles
  - Measurement time horizon
  - Modeling/estimation techniques
  - Drivers of PD

# **Loss Given Default (LGD)**

- Define LGD
- Measure loss for retail exposures
  - Economic loss
- Estimate LGD
  - Based on periods of high credit losses
- LGD for residential mortgage exposures
  - Unique aspects
  - Example risk sensitivity

### Securitization

- Determine structures which retail exposures fall under the securitization framework
- Discuss the hierarchy of capital allocation approaches available under the Final Rule
- Discuss issues related to the implementation

# **Exposure at Default (EAD)**

- Describe the Loan Equivalent Measure (LEQ) and methods for estimating this parameter
- Describe the key differences between the fixed horizon and cohort methods of calculating the EAD measure

 Describe the requirement for LEQ and EAD to be estimated during periods of high credit loss

# **Validation**

- Describe supervisory expectations about validation
- List various techniques that may be used in the validation of IRB segmentation systems and quantification processes

# **CLASS SIZE**

Minimum class size is 10 with a maximum of 30.

# **INSTRUCTORS**

There are usual 4-5 instructors for this course.